

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02100010-2021**
Application Received: **December 9, 2020**
Plant Identification Number: **03-054-021-00010**
Permittee: **Diversified Midstream LLC**
Facility Name: **Glenville Compressor Station #37**
Mailing Address: **101 McQuiston Drive, Jackson Center, PA 16133**

Physical Location:	Glenville, Gilmer County, West Virginia
UTM Coordinates:	515.90 km Easting • 4420.84 km Northing • Zone 17
Directions:	Interstate 79 North to the Burnsville exit (Number 79). Take Route 5 North towards Glenville. Station is on left very near the intersection of Routes 5 and 19 (approximately 16 miles on Route 5).

Facility Description

The Glenville Compressor Station #37 is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of three (3) 300-hp natural gas internal combustion reciprocating engines, one (1) heating boiler, one (1) hot water tank, one (1) electric generator, one (1) 4,000 gallon and one (1) 2,000gallon storage tanks containing oil and pipeline condensates, exclusively, and two (2) 300-gallon tanks containing scrubber oil.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2019 Actual Emissions
Carbon Monoxide (CO)	15.94	9.97
Nitrogen Oxides (NO _x)	125.59	79.08
Particulate Matter (PM _{2.5})	1.95	1.24
Particulate Matter (PM ₁₀)	1.95	1.24
Total Particulate Matter (TSP) ¹	1.95	1.24
Sulfur Dioxide (SO ₂)	0.03	0.02
Volatile Organic Compounds (VOC)	8.25	5.58
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2019 Actual Emissions
Total HAPs ^{2, 3}	3.17	1.99

¹ *PM₁₀ is a component of TSP.*

² *Some of the above HAPs may be counted as PM or VOCs.*

³ *Speciated HAPs are listed in Section 3 of the application (comprised of acetaldehyde, acrolein, benzene, formaldehyde, 1,3-butadiene, n-hexane, ethylbenzene, methanol, toluene, xylene (mixed isomers) and 2,2,4-trimethylpentane and others according to the 2019 CES).*

Title V Program Applicability Basis

This facility has the potential to emit 125.59 TPY of NO_x. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Diversified Midstream LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM from Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Pre-construction permits
	45CSR16	New Source Performance Standards
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for HAPs
	40 C.F.R. Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. 63 Subpart ZZZZ	NESHAPs-MACT for RICE
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Control fugitive particulate matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
G60-C096	October 19, 2017	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

Since the previous permit renewal was issued, the following changes took place:

1. The company's name was changed from "Equitrans, LP" to "Diversified Midstream LLC", therefore the company's name was revised throughout the permit.
2. Emission Units Table – an old 147 hp emergency generator G-001 was removed because it was replaced with the new natural-gas fired 155 hp emergency generator G-002; an old 1.25 MMBtu/hr boiler BLR01 was replaced with the new 1.26 MMBtu/hr boiler BLR02.
3. Section 4.0 – ten (10) percent opacity limit is applicable to the new boiler BLR02 (45CSR§2-3.1, existing condition 4.1.1), therefore the boiler ID was corrected in the Section's name (from "BLR01" to "BLR02") to reflect removal of the old boiler (BLR01) and installation of the new boiler (BLR02). Also, monitoring requirements 4.2.1 (opacity monitoring per 45CSR§2-3.2) and 4.2.2 (visual emissions observations) were added.
4. Section 5.0 - revised citations to conditions 5.1.5 (removed "(a) and (b)") and 5.4.2 (removed "(a), (b) and (c)") because whole sections (40 C.F.R. §63.6605 and 40 C.F.R. §63.6660 respectively) are applicable to the engines.
5. Section 6.0 – removed requirements applicable to the old emergency generator G-001 and included requirements of Class II General Permit G60-D and a General Permit Registration G60-C096 (issued on October 19, 2017) for the new Emergency Generator G-002. The emergency generator supplies power to the compressor station in the event of a utility power loss. The only planned run time is

during normal engine maintenance which is expected to be approximately 15 minutes a week for testing and maintenance purposes (12 hours per year).

Class II General Permit G60-C was superseded and replaced by Class II General Permit G60-D. Therefore, all the general permit requirements, included in this Title V permit, are based on the latest version of the general permit (G60-D). Emission limits for the G-002 set forth in the General Permit Registration G60-C096 are included under condition 6.1.1, maximum hourly limitation (500 hours per year) is included under condition 6.1.2, and the emergency generator operating requirements are included under condition 6.1.3.

Requirement 6.1.4 includes an applicable provision of the 40 C.F.R Part 63 Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)*.

40 C.F.R Part 63 Subpart ZZZZ Applicability Table

Emission Unit ID	Design Capacity	Ignition	Use/Type	Year installed	HAP Source Classification
G-002	155 hp	Spark Ignited	4SRB, Emergency	2017 (new)	Area source

Per 40 C.F.R. §63.6590(a)(2)(iii), this SI engine constructed in 2015 is considered a new unit (area source unit constructed on or after June 12, 2006). Therefore, per 40 C.F.R. §63.6590(c)(1), it must meet the requirements of 40 C.F.R. Part 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R Part 60 Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*. Applicable requirements of 40 C.F.R. 60 Subpart JJJJ, were included under conditions 6.1.5 through 6.1.9 (limitations and standards), 6.2.1 (monitoring), 6.3.1 (testing) and 6.4.4 (recordkeeping).

The new generator G-002 is subject to 40 C.F.R. 60, Subpart JJJJ emission limits for NO_x, CO and VOC for emergency engines with HP ≥ 130 manufactured after 01/01/2009 (as per Table 1 to 40 C.F.R. 60 Subpart JJJJ, condition 6.1.6). Since the generator is certified by USEPA as in compliance with the standards under 40 C.F.R. 60, Subpart JJJJ, it is not subject to testing if it is operated and maintained according to the manufacturer's written emission-related instructions.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following (as per revised Permit Shield, condition 3.7.2):

- a. **40 C.F.R. 60 Subparts D, Da, Db, and Dc.** These subparts apply to steam generating units of various sizes, all greater than 10 MMBtu/hr. The Glenville Compressor Station does not have any steam generating units greater than 10 MMBtu/hr; therefore, the requirements of NSPS Subparts D, Da, Db, and Dc do not apply.
- b. **40 C.F.R. 60 Subparts K, Ka, Kb.** These subparts apply to storage tanks of certain sizes constructed, reconstructed, or modified during various time periods. Subpart K applies to storage tanks constructed, reconstructed, or modified after 1973 and prior to 1978, and subpart Ka applies to those constructed, reconstructed, or modified after 1978 and prior to 1984. Both subparts K and Ka apply to storage tanks with a capacity greater than 40,000 gallons. Subpart Kb applies to volatile organic liquid (VOL) storage tanks constructed, reconstructed, or modified after July 23, 1984 with a capacity equal to or greater than 75 m³ (~19,813 gallons). Both Tanks (1 and 2) were installed after July 23, 1984, therefore NSPS Subparts K and Ka are not applicable. Tank 1 has a capacity of 2,000 gallons. Tank 2 has a capacity of 4,000 gal. Therefore, NSPS Subpart Kb does not apply to the storage Tanks 1 and 2 at the Glenville Compressor Station.

- c. **40 C.F.R. 60 Subpart KKK – *Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants***. According to 40 C.F.R. §60.631, a *Natural gas processing plant* (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. Although this subpart includes requirements for compressors and storage tanks, it only applies to those units located at a processing plant as defined by the rule. The operations at the Glenville Compressor Station do not meet the definition of a *Natural gas processing plant*. Therefore, the requirements of this subpart do not apply to the emission units at the Glenville Compressor Station.
- d. **40 C.F.R. 60 Subpart LLL – *Standards of Performance for Onshore Natural Gas Processing: SO₂ Emissions***. This subpart applies to each sweetening unit, and each sweetening unit followed by a sulfur recovery unit, at a natural gas processing plant. The Glenville Compressor Station does not meet the definition of a natural gas processing facility, nor does the station include a sweetening unit. Therefore, the requirements of this subpart do not apply.
- e. **40 C.F.R. 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines***. This subpart applies to manufacturers, owners, and operators of stationary compression ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is July 11, 2005. All of the engines (C-001, C-002, C-003, G-002) at the Glenville Compressor Station are spark ignition IC engines, and therefore the requirements of this subpart do not apply.
- f. **40 C.F.R. 60 Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines***. This subpart applies to manufacturers, owners, and operators of stationary spark ignition internal combustion engines that have been constructed, reconstructed, or modified after various dates, the earliest of which is June 12, 2006. All of the engines at the Glenville Compressor Station (except engine G-002) were installed prior to 2006 and have not been modified or reconstructed, and therefore the requirements of this subpart apply only to engine G-002.
- g. **40 C.F.R. Part 63 Subpart HH – *National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities***. According to 40 C.F.R. §63.760, Subpart HH is applicable to emission points that "are located at oil and natural gas production facilities that meet the specified criteria". A facility must either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer (§63.760(a)(2)) or process, upgrade or store natural gas prior to the point which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user (§63.760(a)(3)). The Glenville Station is considered a natural gas gathering station and is located prior to the point of custody transfer. However, the Glenville Station is an area source of HAP, and as such the potentially-affected sources regulated by Subpart HH are TEG dehydration units (§63.760(b)(2)). Since the Glenville Station does not have any such dehydration units, this rule does not apply.
- h. **40 C.F.R. Part 63 Subpart HHH - *National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities***. According to §63.1270(a) "This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271." Specifically, §63.1270(b) states that the affected source is each glycol dehydration unit. The Glenville Compressor Station is an area source of HAPs and does not have a dehydration unit. Therefore, the requirements of this subpart do not apply.

- i. **40 C.F.R. Part 64 – Compliance Assurance Monitoring.** According to the renewal application the engines (C-001, C-002, and C-003), boiler (BLR02), generator (G-002), and tanks (Tank 1, Tank 2) do not have any control devices. Since no emission unit meets the applicability criterion at 40 C.F.R §64.2(a), CAM is not applicable to these sources.
- j. **45CSR10 – To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.** The exemption at 45CSR§10-10.1 specifically states, “Any fuel burning units having a design heat input under ten (10) million BTU's per hour will be exempt from section 3 and sections 6 through 8.” Rule sections 4 and 5 are not covered by this exemption. 45CSR§10-4 sets SO₂ limits from source operations, but 45CSR§10-4 does not apply to BLR02 because it is not a “source operation” as defined in 45CSR§2-2.19. Also, 45CSR§10-5.1 prohibits combustion of refinery process gas streams or other process gas streams that contain certain concentrations of hydrogen sulfide, and 45CSR§10-5.2 pertains to by-product coke operations. The boiler BLR02 is not subject to either of these subsections; therefore, 45CSR§10-5 does not apply to BLR02. Finally, according to the fact sheet for permit R30-02100010-2006, prior to the issuance of permit R30-02100010-2006, DAQ determined that 45CSR10 is not applicable to the compressor engines.
- k. **40 C.F.R. 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.** The facility is a non-major source of HAP; therefore, this rule does not apply to the Heating Boiler (BLR02).
- l. **40 C.F.R. 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.** According to 40 C.F.R. §63.11195(e), a gas-fired boiler as defined in §63.11237 is not subject to this subpart and to any requirements of this subpart. The definition states that a “*Gas-fired boiler* includes any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.” The gas-fired Heating Boiler (BLR02) combusts only natural gas and does not combust solid or liquid fuels. Therefore, the Heating Boiler (BLR02) meets the exemption in §63.11195(e) and this rule does not apply.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: July 1, 2021
Ending Date: August 2, 2021

Point of Contact

All written comments should be addressed to the following individual and office:

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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.